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AUTHOR	Cap, Ihor
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ABSTRACT

Many educational researchers have harnessed various technologies of instruction to improve the reliability of their egalitarian and utilitarian interventions. Their experiments with adolescents and adults yield important post-course effects, yet, little is known about the effects of instructional media with adolescent or adult multicultural subjects. These are important to instructional and motivational designers and planners working with such populations. This paper gives professionals and experienced practitioners empirical information on the application possibilities, message content, communication channel(s) used, audience characteristics, and audience response. It should be useful for professionals and experienced practitioners who want to understand how to make informed decisions when planning for instructional media interventions with adolescent or multicultural populations. The related literature is presented in two sections: (1) Information (Knowledge) and/or Attitude Change Studies, and (2) Persuasiveness Studies. A synthesis of responses to deal with the challenges of organizing and optimizing egalitarian and utilitarian interventions concludes this digest. (Contains 14 references.) (AEF)

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THE EFFECTS OF INSTRUCTIONAL MEDIA AND ETHNOCULTURAL CHARACTERISTICS ON EGALITARIAN AND UTILITARIAN LEARNING: AN EMPIRICAL DIGEST OF CONTROLLED RESEARCH STUDIES

As at September 25, 2001

by Ihor Cap, Ph.D.

Author Ihor Cap, Ph.D. (Winnipeg, Manitoba, Canada) is Program Development Co-ordinator with Manitoba Education, Training & Youth, Apprenticeship Branch. He completed his Education Specialist degree and Doctoral degree at The Florida State University, and his M.Ed. in Instructional Technology from The University of Manitoba. He is also a member of the Ukrainian Academy of Arts and Sciences in Canada, and Executive Treasurer for the American Society for Quality - Manitoba Section.

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INTRODUCTION

Many educational researchers have harnessed various technologies of instruction to improve the reliability of their egalitarian and utilitarian interventions. Their experiments with adolescents and adults yield important postcourse effects. Yet, little is known about the effects of instructional media with adolescent or adult multicultural subjects. These are of importance to instructional and motivational designers and planners working with these populations. This digest gives professionals and experienced practitioners empirical information on the application possibilities, message content, communication channel(s) used, audience characteristics and audience response. The common desire of these research experiments is to improve the egalitarian and utilitarian contexts of cultural and economic life in North American society. The findings and conclusions challenge our assumptions of learners and the processes of learning or change as we consider, design or restructure our instructional and motivational interventions to achieve the purposes intended.

Many authoritative Canadian and American resource guides, existing media research digests and finding aids, as well as computer searches helped the author establish his literature base that ends in 1995. The literature search was not meant to be exhaustive. However, sources of data are documented so future researchers can sidestep these databases and avoid duplication of effort. It is the only digest known to this researcher which involves ethnocultural variables and the use of adolescent or adult control subjects

(or statistical control). Anecdotal evidence, public opinion measures and studies not involving experimental manipulation were excluded from this review. Also excluded from the search process were studies not involving the race or ancestry variable, adolescents or adults and the use of control subjects (or statistical control). Consequently, only 14 studies met the parameters of these search criteria. The earliest known media research study involving ethnocultural characteristics with control subjects was conducted in New York city and dates back to 1943. The first and only known experimental study involving multicultural and control subjects in a Canadian context was published in 1995. Accordingly, this collection of studies span's a 52-year interval. They are scanty in number and are indicative of the need for experimental manipulation involving ethnocultural variables in media research. This digest will appeal to professionals and experienced practitioners who want to know and understand how to make better and informed decisions when planning for instructional media interventions with adolescent or adult multicultural populations. The related literature is presented in two sections: (1) Information (Knowledge) and/or Attitude Change Studies and (2) Persuasiveness Studies. A synthesis of responses to deal with the challenges of organizing and optimizing egalitarian and utilitarian interventions concludes this digest.

LITERATURE SEARCH

Sources of Data

Index A. Resource Guides and Finding Aids

1. Burnet, J. (undated). Canadian studies resource guide: Multiculturalism in Canada. Canadian Studies Directorate.
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9. Walleghem, V.J. (1990). Multicultural educational resources: An annotated bibliography. Winnipeg: Multiculture Educational Resource Centre, Instructional Resources Branch, Manitoba Education and Training.

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Index B. Computer Searches

1. Educational Resource Information Center (ERIC) database (1970-1995)
2. Dissertation Abstracts International (1970-1995)
3. Sociological Abstracts (1970-1995)

The computer searches were restricted to any combination of the following descriptors: cultural pluralism and media research, cultural pluralism and

minorities, cultural pluralism and ideology, and minority groups, change, and media research. The related literature is presented in the following sections:

- Information (Knowledge)and/or Attitude Change Studies
- Persuasiveness Studies
- Conclusions

DIGEST OF EMPIRICAL STUDIES

Information (Knowledge) and/or Attitude Change Studies

Several studies have attempted to provide evidence on the effectiveness of planned interventions in relation to attitude change alone.

Forty-six experimental subjects were carefully selected from six classes at Columbia University's Teachers College and exposed to a two consecutive weekend four-day "orientation in the community, occasions of social hospitality, introduction to certain Negro accomplishments, and a variety of Negro views on American race relations." (Smith, 1943, p.25) The experimental and control groups were closely matched by sex, region and national descent from initial scores on the attitude test battery. They were retested along with the other classes approximately 10 days after receiving the treatment. Whereas the initial and retest means of the control group remained virtually constant, the experimental group experienced statistically significant gains in favorable attitudes toward the Negro on all components of the attitude

test battery except one, which closely approximated significance. Slight but practically negligible variation in attitudes was found when age and intelligence were examined. Variation among geographic regions was nonsignificant nor important to the variation within regions. A slight but important variation could be attributed to sex. Men had more favorable attitudes than women.

The object of Furuto's (1981) dissertation was to assess differences, if any, between (1) an Affective Treatment Group (ATG) subjected to planned group experiences focusing on interpersonal interactions and/or relationships, (2) a Cognitive Treatment Group (CTG) subjected to planned, nontraditional classroom mime, role, field trips, values' clarification exercises, and ethnic activities, (3) a Hawaii Control Group (HCG) or no planned treatment group subjected to experiences with diverse cultures and activities at Brigham Young University–Hawaii Campus in the State of Hawaii, and (4) a Mainland Control Group (MCG) or no planned treatment group that was simply encouraged to participate in the on and off-campus cross-cultural activities offered at BYU in Provo on the Mainland continent of the U.S.A., on five dependent measures: social distance toward Negroes, Orientals, and Polynesians and irrational attitude against and for ethnic minorities. Approximately 300 full-time, single, white students were pretested at the beginning of the Fall semester, treated during the entire semester, and posttested at the consummation of the Fall semester. Analyses of covariance and t tests revealed that the position of the ATG, CTG, HCG, and MCG from most to least effective in treating attitude changes (i.e., from nearest to

farthest social distance toward, from lowest to highest irrational attitude against, and from highest to lowest irrational attitude for ethnic minorities) ranked as follows:1) ATG, (2) CTG, (3) HCG, and (4) MCG. When Furuto (1981, p.81) assessed the general importance of the classification variables: sex, socioeconomic status, educational level or university credit hours, amount of contact, and type of group, there were no significant differences in general. However, females did show less social distance toward ethnic minorities than males despite type of group, and higher socioeconomic status subjects showed less social distance toward ethnic minorities than lower socioeconomic status subjects (Furuto, 1981, pp. 80-81).

The relationship between participation in a standard Civil Defense Adult Education telecourse and favorable attitudes toward civil defense resulting from the specially designed 12-hour course was studied by Weldon (1962). One hundred and thirty-five 135 teachers were matched by race, sex, marital status, parenthood, and home ownership. The results of the t-tests showed significant differences between the attitudes expressed by teachers in the experimental group and the attitudes of teachers in the no treatment-control group. In four of the five cluster areas, the experimental group's lower scores showed an attitude more favorable than that of the no treatment-control group. Little variation in civil defense attitudes was found when parenthood, sex, and home ownerships were examined, and minor variations could be attributed to race (Weldon, 1962, p.52). Compared to the Negro control group, only the Negro experimental group appeared to express much more favorable attitudes toward the adequacy of State and National Civil

Defense Programs and related services.

Other studies endeavored to distribute new or relevant information to audiences about certain groups on the assumption that this would improve their attitudes toward these particular groups.

Of the 116 participating student social workers in three predominantly black and three predominantly white higher education institutions, McJulien (1979) effected significant changes in the acquisition of knowledge and attitude change toward the black aged after three hours of instruction. Both groups were similar before any instruction. Neither group was any more knowledgeable about the black aged. No interaction effects were found on the dependent measures (knowledge and attitudes) when race was accounted for. Nor were any significant relationships found between the variables and background characteristics (e.g., the hometown, courses in aging, age, sex or having worked with elderly blacks) of the students.

Green (1953) found a significant positive correlation between the initial level of information about the Negro and respective attitudes of 224 Southern white high school students. The brief ". . . set of reading paragraphs, requiring about 40 minutes, and designed to present facts about the Negro" (Green, 1953, p.1839) resulted in significant gains in both information and attitude. Examination of the "before-and-after" scores revealed that information gains were larger than those that resulted for attitude. Students who learned more new information made the greater gains in attitude than students who already knew the material or failed to learn the material. Reading (comprehension) scores were highly associated with intelligence.

Pestle (1980) gathered evaluative research data from six Florida high schools to decide the effectiveness of a series of training materials and four "methods of instruction" (Print Modules, Slides [Audio-Filmstrip], Slides/Print Module Combination, and Teacher-Control Class). Students were tested for changes in (a) attitudes toward the aged and facts on aging, and (b) knowledge of the tasks presented for one of six possible homemaking areas: Food Management, Nutritional Needs, Food Purchasing, Working with the Aged, Housekeeping and Laundry. Pestle (1980) found sex and race to be significant factors in relation to knowledge of certain homemaking tasks for the aged. Available posttest data scores show that males scored much less than females on the posttest in the Food Management task area. Blacks scored much lower than whites on the pretest. The Food Management posttest scores were also significant by type of medium employed. Posttest scores were much higher for the slides (audio-filmstrip)/print module combination group than for the slides group, the same teacher in a control class or the print module group only. Knowledge of (1) Nutritional Needs, and (2) Working with the Elderly was the only other task area affected by race. Posttest scores for white students were much higher than for the black students in both the Nutrition and Working with the Elderly task areas. However, white students had much more knowledge in both task areas to begin with which may account for their superior performance. The print method was much better in determining posttest performance for those who sought knowledge in the Working with the Elderly and Nutrition Needs task areas. The print modules or their combination with the slides (audio-filmstrip) methods were

considered effective based on pre to post gain scores for each six testing situations. The slides or their combinations with the print modules were also regarded successful in improving some students' attitudes.

In a separate but related media comparison study, Wilcox and Pestle (1980) investigated the secondary school usage of instructional materials on nutrition and aging with seventy black and white students of both sexes in four home economics classrooms. The no treatment-control class consisted of sixteen subjects, the print module only class consisted of nineteen subjects, the slides (audio-filmstrip) only class consisted of twenty subjects. The slides/module combination class consisted of fifteen subjects. Students were pretested on the first day (knowledge and attitude), received treatment or no treatment on the second day, and were posttested (knowledge and attitude) on the fourth day. None of the classes made a significant difference in the students attitude toward the aged. The attitude change was negligible in the control and slides classes. It was negative in the module and slides/ module classes showing a deteriorative attitude toward the elderly. No significant interactions by race, sex and by midterm grades were shown. Thus, neither of these variables was a factor in determining attitude scores. The results of the analysis of variance of nutrition pretest scores by class and sex revealed no significant differences. However, significant interaction by race was shown. Pretest mean scores for whites were much higher than for blacks. The slides/module combination method was much better in determining posttest nutrition performance. Sex was not a factor in determining posttest knowledge scores. Type of class and races were both significant in the posttest

analysis. Posttest scores were higher in the module only class than for the slides/module combination class, the slides class alone, and the no treatment control class. Posttest scores for white students were much higher than for the black students. However, white students had much higher pretest scores to begin with which may account for their superior postcourse performance. When midterm grades were accounted for (used as a covariate), the slides/module combination and print module alone were still better in determining posttest nutrition knowledge than the other methods.

The effects of a career guidance program on the career maturity and self-concept of black and white delinquent youth were studied by Pavlak and Kammer (1985) to verify two propositions of vocational development theory formulated by Super (1953). That (1) "vocational development can be guided," and (2) "the process of vocational development is largely that of developing and implementing a self-concept" (in Pavlak & Kammer, 1985, p.42). Forty subjects were matched by age and race-strata equivalency scores from a screening form for random assignment to either a treatment group or no-treatment control group. The eight weeks two hours per week multimedia career guidance program, emphasizing "... guidance activities in self- and occupational awareness, decision making skills, and job seeking skills," (Pavlak & Kammer, 1985,p.44) did not result in significant posttest differences in career maturity levels and the self-concept levels of the black and white delinquents in the treatment and the no-treatment control groups. However, a review of the "before-and-after" scores revealed that career maturity and self-concept gains were higher for the black and white

treatment groups than the black and white no-treatment control groups.

Persuasiveness Studies

The relative effectiveness of learning or change as a function of vicarious recognition and identification with an ethnic or social model has been investigated in several persuasiveness studies.

Most important to the study conducted by Kraus (1962) was the relative effectiveness of Negro and white actors in changing the attitudes of 525 eleventh-grade white students toward Negroes with the independent variable being the race of the actors involved. Eight schools were assigned in pairs for exposure to one of four kinescope recordings that differed in all respects as little as possible, except as to the performers. Version one used two white performers; version two, two Negro performers; version three, one white performer and one Negro performer; version four, the same as three, but with the roles reversed. The 9th school, involving the largest number of students, used no kinescope as a control. T-test, analyses of variance and covariance results showed that only versions three and four were much better than version one in reducing prejudice, and version three was much better than version two. Role reversal was not a factor as such.

The effect of communicator race, open and closed-mindedness, and responses to informative communications were studied by Miller and Roberts (1965) with 72 white undergraduates enrolled in a communication's course at Michigan State University. Based on pretest responses to an abridged Dogmatism Scale, half these students were found closed-minded and the remaining half open-

minded. Eighteen were randomly selected from each category for the Negro communicator conditions while the remaining subjects were assigned to the white communicator conditions. All subjects (Ss) were treated to "... fictitious information dealing with scientific research on the problem of weather control ... to control for possible initial differences in learning among Ss." (p.262) The treatments were identical in all respects, except the pictures that established the race of the female bogus tour "guides." The two-factor analysis of variance results for variance components from two levels of mindedness (open v closed) and two communicator levels (white v Negro) exerted a significant overall main effect of communicator race. It was shown that white Ss exposed to a presentation by a Negro communicator retained less information than white Ss treated to the same message by a white communicator. Supplemental Newman-Keuls test results further showed that closed minded Ss in the Negro communicator condition retained much lower mean information scores than Ss in any of the other three treatment conditions. Although attitudes' toward "research on weather control" were favorable for all conditions, with posttreatment mean scores lowest in the closed-minded Negro communicator condition and highest in the open-minded Negro communicator condition, only mindedness exerted a significant main effect. The communicator race factor appeared to exercise less of an effect on the Ss attitudes toward message content than did closed-mindedness (Miller & Roberts, 1965, p.266).

The two separate experimental studies of Ganschow, Stilwell III and Jones (1970) have shown that the vocational information-seeking behaviors,

interests and opinions of students of the same ethnic background or not can be influenced by ethnic social modeling techniques. Study A compared the mean effectiveness of two experimental videotape treatments against two active-control conditions (an audiotape and a script) with 247 tenth grade middle and lower socioeconomic class students. Study B compared the mean effectiveness of two experimental film treatments against that of two control conditions (Active = booklet treatment; Inactive = baseline treatment) with 132 tenth-grade students. The baseline control treatment consisted of counselors informing students of the vocational center's services with no additional information.

Among the key findings about Study A, analysis of covariance (ANCOVA) results for variance components from two levels of treatment (MA model videotape v the NMA model videotape), two ethnic group levels, and two socioeconomic levels exerted a significant overall main effect of vocational interest. It was shown that Mexican-American (MA) subjects viewing the MA videotape scored higher on the vocational interest measure than did non-Mexican-American (NMA) subjects assigned to the same treatment, whatever socioeconomic class. As well, NMA subjects viewing the NMA model videotape scored higher on the vocational interest measure than did MA subjects assigned to the same treatment. Some ethnic student modeling procedures and hypothesized interactions did not exert any significant effects on the subjects' opinions toward vocational education one or two days after treatment or on their vocational information-seeking behaviors three-weeks after. Nevertheless, the test of the main effect on the vocational education

opinion measure was significant suggesting that the NMA model videotape can be used to effect opinion changes about vocational education in both MA and NMA students. Supplemental F-test results from the analysis of variance (ANOVA) procedures performed on the subjects' immediate reactions to the four treatment conditions further shown that MA subjects exhibited much greater interest in, and stimulation by the vocational guidance curricula materials than NMA subjects. However, these interest and reported stimulation levels "did not carry over to consistent changes in vocational information-seeking behaviors, opinions, and interest changes." (pp. 93-94)

From the ANOVA procedures performed on the subjects' information-seeking behaviors, Study B showed that the test of the main effect of sex reached significance, with males doing fewer information-seeking behaviors than females. The ethnic group by sex interaction also exerted a significant effect, with MA females doing considerably fewer information-seeking behaviors than NMA females, while MA females scored higher than MA males on this measure. Further, MA male and female subjects viewing the MA social model did higher information-seeking behaviors showing a differential modeling effect among these subjects. Although attitudes toward vocational education were positive one week after the treatment administration, with posttreatment mean scores higher than pretreatment mean scores in 11 of 16 possible cases, this trend was not supported statistically and was therefore negligible. ANCOVA results for variance components from four levels of treatment, two ethnic group levels, and two sexes did not exert any significant main or interaction effects in attitudes toward vocational

education. Study B results also suggested that films, more so than the booklet treatment,are more positively reacted to by all subjects. Overall, Study A established the presence of a significant modeling effect of vocational interest and less of an effect on the subjects opinions toward vocational education. This was shown by both MA and NMA subjects who viewed the ethnic modeling videotape treatments. Study B subjects clearly preferred film formats, more so than the booklet format, and that females, in response to the treatment suggestions, were engaged in vocational information-seeking behaviors much more than males.

To determine the feasibility of designing sound slide audiovisual materials and its combined effects at the awareness, responding, valuing, organization and characterization levels of affect, Allen, Sweet, and Cooney 1968) randomly assigned 128 (59.3%) Negro and 88 (40.7%) non-Negro junior high school boys from a culturally disadvantaged area of Pasadena-California to one of four experimental treatment presentations combining two organizational formats (Multi-Choice Sequence v No Choice Sequence) and two conditions of audience participation (Participation via intermittent stops for voice entered miked tape recordings v No Participation). The audio track carried the main instructional message while the colored visual slides played a supportive role. Any superfluous comments were edited to conform to the intent of the main message: "that of changing the attitudes of the boys toward the values of school learning and the importance of an education." (p.11) A 5th experimental treatment unit was presented employing front screen projection, an audio speaker, and group discussion, directed by one principal

investigator (Caucasian). As with other experimental units, the no treatment-control unit was pretested two weeks before any treatment administrations and posttested immediately after with an Inventory of Self Appraisal (ISA) for assessment of attitudinal effects at five levels of affect and the ISA as a whole by race, six treatment units and mental ability level. The California Test of Mental Maturity mean test scores, obtained from the school's student records were used to assign subjects into High IQ and Low IQ categories. From the t-test procedures did on the subjects' (N=216) Total ISA scores, it was shown that the Multi-Choice organizational method with the active participation condition was much better in determining positive attitudes than the Multi-Choice/No Participation or the No Choice/No Participation treatment methods. When Total ISA mean difference scores were analyzed by race, the Multi-Choice/Participation method was still much better in determining positive attitudes than the Multi-Choice/No Participation, No Choice/Participation, No Choice/No Participation and Control Class methods for Negro subjects (N=128), except the Group Discussion method. Negligible differences were found for the Non-Negro subjects. However, superiority of the Multi-Choice organizational method with active participation aside, the data also showed that this method exceeded the Total ISA scores of the no treatment-control class. That the superiority of the Multi-Choice/ Participation method "cannot be accepted with confidence," (Allen, Sweet & Cooney,1968, p.17) was further shown by the lack of any significant treatment effects by Format (Multi-Choice v No-Choice), when a 2-way analysis of variance (ANOVA) was done on the Total Groups, Non-Negro Groups and the Negro

Groups. Nevertheless, the test of the main effect on the Participation variable (Participation v No Participation) was significant for all subjects on the Total Test and for the Negro Groups suggesting that active participation can be used to effect positive attitude changes. A Multi-Choice/Participation interaction effect was significant only for the Negro groups, and only at the Responding Subtest level of affect.

Only the Low IQ Negro groups showed any significant difference from the Total ISA difference scores and ANOVA results for treatment, racial and IQ groupings (High IQ, above mean; Low IQ, below mean). Reported mean difference scores were greatest for the Group Participation treatment and Multi-Choice/Participation treatment. The no treatment control class registered the largest positive changes in attitude when compared with the remaining treatments for this group of subjects (Multi-Choice/No Participation, No Choice/Participation, No Choice/No Participation, in that order). Despite a negative impact on the latter treatment method, noteworthy here is the fact that "... this is the only comparison in the entire study where an acceptable level of significant superiority (<.05) over the Control group was obtained" (Allen, Sweet, & Cooney, 1968, pp. 22,25). The Group Participation method was again the exception to the superiority of the Multi-Choice/Participation method.

Cap's (1995) dissertation assessed the usefulness and effectiveness of a self-instructional print module on multicultural behavior change (i.e., knowledge and ideology) in learners in trade apprenticeships in Manitoba. The module, requiring about 40 minutes, was designed especially for apprentices

and evaluated for contributing to a receptive framework for "Multiculturalism ...being Canadian." Contents were based on a federal government-document advocating cultural pluralism. For the purposes of this study, the contents were updated and, systematically adapted and standardized to include four Learning Experiences in which a rationale and statement of instructional goal, general instructional objectives and specific learning outcomes, learning activities, self-tests, self-test answer keys were used in attaining the instructional goal. To support the verbal information in the module,all original document photographs were replaced by black and white photographs of apprentices representing various age, gender, trade and racial groupings, among other cultural and historical illustrations.

The main experiment followed a "Pretest-Posttest Control Group Design" with randomization. Posttest measures were administered seven days after the pretests and instruction. Statistical analyses were done on 83 serviceable majority (British and French ancestry) and minority (non-British and non-French ancestry) apprentice-learners. ANCOVA results exerted a large and significant posttest difference between the experimental group and the nontreatment control group regarding apprentices knowledge of multiculturalism. All the same, ANCOVA results exerted a moderate but nonsignificant posttest difference between the experimental group and the nontreatment control group regarding apprentices acceptance of a multicultural ideology. ANOVA results did not exert any significant motivational module appeal difference between majority and minority apprentices. Both groups were similar in knowledge and attitudes before any

instruction. No significant posttest interaction effects were found between ancestry and type of group regarding knowledge of multiculturalism or acceptance of a multicultural ideology.

While minority apprentices were inclined to rate the usefulness or motivational appeal of contents and activities presented higher than majority apprentices across the attention, relevancy, confidence and satisfaction subscales, and proportionately higher on confidence items, these differences were of no statistical significance. Thus, the product thrust directed toward establishing "equal appeal" (that is, statistically) among participants of all origins was supported. The use of preproduction testing formative evaluation) was statistically supported in all cases but one. Although not statistically significant, examination of pretest and posttest scores revealed that both groups initially had high regards for the value of multiculturalism and this attitude did not change over time. The strongest and most enduring factors in predicting postcourse success on the knowledge measure were prior knowledge of multiculturalism followed by ancestry explaining 56% and 13.3% of the variance respectively. Prior ideological acceptance of multiculturalism, the lack of previous Charter (of Rights and Freedoms) "knowledge", and the motivational orientations of the learner after instruction explained about 72%, 3.7% and 2.7% of the variance respectively in the postcourse ideology measure. Similarly, the best predictors of usefulness scores on the postcourse motivational appeal measure were prior knowledge of multiculturalism followed by religion explaining 17.11% and 11.97% of the variance respectively. Multicultural ideology precourse scores

remained in the prediction equation becoming third in importance.

Conclusions

This digest reported the effects of experimentation studies that attempted to provide objective evidence on the effectiveness of instructional media in relation to Information (Knowledge) and Attitude Change, and Persuasiveness with diverse nationalities. Some responses to deal with the challenges of organizing and optimizing egalitarian and utilitarian interventions are offered. The patterns and trends in the investigations here coalesced to form the following conclusions:

- Media technology can effect instructional improvements in all three learning domains.
- Instructional improvements in the cognitive domain do not always carry over to improvements in the affective domain.
- The affective domain is more problematic than the cognitive or psychomotor domains for effecting improvements.
- Information (knowledge) gains are often greater than attitude.
- Individuals' who learn more (new) information tend to make the larger gains in attitude than individuals who learn less.
- In some instances, ethnic or racial groups are not any more (or less) knowledgeable about their own group(s) than groups not of the same ethnic or racial backgrounds.

- Ethnic and racial minority attitudes can be favorably affected by planned intellectual and social contacts.
- Not all groups or sub-groups will be evenly affected.
- An audience is much more susceptible to persuasive messages if the treatment suggestions target this audience for improvement.
- Given the opportunity for active participation or choice in subsequent sequence selection during exposure to the communication enhances the likelihood of low mental ability groups to respond positively to the treatment suggestions.
- Given the opportunity, ethnic and racial groups are more likely to be affected by their own student social models with positive results.
- Given a context shared by both the audience and communicator, same race audience members empathize more with a recording comprising two different racial actors versus a recording using same race actors.
- Racial groups treated to a message by a non-same background presenter tend to retain less information than groups treated to the same message by one of their own.
- The communicator race factor tends to exercise less of an effect on individuals' attitudes toward message content than does closed-mindedness.
- Females, in response to the treatment suggestions, are more inclined to perform vocational information-seeking behaviors than males.
- Females belonging to an ethnic minority group, in response to the treatment suggestions, are less inclined to perform vocational information-seeking

behaviors than females as a group.

- Individual motives tend to mirror group motivation.
- The superiority of such ethnic variables as ancestry and religion in predicting postcourse success is displaced when precourse performance scores are accounted for.
- It is not only the precourse knowledge and attitudes of the learner that are important to postcourse success, but it is also a matter of the subsequent preparation of contents and activities to be in harmonious correspondence with these characteristics.
- The use of preproduction testing (formative evaluation) notably increases the probability of postcourse success.

We can glean much from a brief, if informal survey on an audience. Adolescents and adults bring to the learning (change) situation different levels of readiness, knowledge, personalities, skills, cultural beliefs and life experiences. Personal information questionnaires, public opinion measures and precourse performance testing efforts help us understand the status behind these phenomena. We gain much more understanding when researchers can change the course of such phenomena. This type of approach requires experimental manipulation. It is hoped that this digest may serve to negate the apparent indifference accorded to ethnocultural variables in media research experimentation and learning. The conclusions rendered herein attest to their utility and importance.

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